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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,390	07/09/2002	Louis R. H. A. Willemsen	000771.00030	2890

22907 7590 10/19/2004

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WASHINGTON, DC 20001

EXAMINER

NGUYEN, THUKHANH T

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,390

Applicant(s)

WILLEMSSEN, LOUIS R. H. A.

Examiner

Thu Khanh T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5 and 8 is/are rejected.
- 7) ☒ Claim(s) 3,4,6,7,9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (specification page 1) in view of Aoki (4,859,170).

The admitted prior art disclose a blow-molding apparatus, comprising a lower mold with cavities, means for carrying the layer of material to be mold onto the lower mold, supply means for supplying gas to the upper side of the lower mold, heating means for heating the lower mold, and mandrel movable into the cavities (spec. 1, page 1, lines 1-15).

The admitted prior art, however, fails to teach or suggest that the cavity wall is divided into segments, and a drive element to drive these segments between a first and a second position.

Aoki discloses a clamping device for a blow mold, comprising a plurality of wall segments (Fig. 4, 5a, 5b, 6a, 6b) and a drive element (Figs. 1-2, 9 & 11) for driving the wall segments between a first position (Fig. 1, 5, 6) to a second position (Fig. 2, 5, 6); wherein the drive element is coupled to the wall segments of adjacent cavities and resides in a space between the adjacent cavities (Fig. 2, 11, 5 & 6).

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the admitted prior art by providing the mold cavity having a

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plurality of mold segments as taught by Aoki, because a cavity with multiple mold walls would be more flexible to remove the formed product than a rigid, one piece mold cavity.

In regard to claim 2, the admitted prior art fails to disclose that the drive elements is movable in a direction perpendicular to the direction of the movable segments, and is connected to the segments by a coupling. Aoki discloses that the drive element (9, 11) is driven in a vertical direction, which is perpendicular to the horizontal movement of the segments to save space, and a coupling cylinder (14) connecting the mold segments to the drive element (9, 11). It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the admitted prior art by providing the drive element movable in a direction perpendicular to the direction of the movement of the mold segment, and a coupling cylinder as taught by Aoki, because when the drive elements are arranged in a direction perpendicular to the movement of the moving direction of the mold segments, it would save operating space; and the coupling cylinder would connecting the drive element to the mold segments.

In regard to claims 5 and 8, the admitted prior art fails to disclose guide means connecting to the mold segments. Aoki discloses the guide bars (3) connecting to the mold segments (5a, 5b, 6a, 6b) for guiding the movement of the segment between a first and second positions. It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the admitted prior art by providing guide means as taught by Aoki, because the guide means would guide the movement of the mold segments between different positions.

Allowable Subject Matter

3. Claims 3-4, 6-7 and 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record discloses all limitations as set forth in the current claims 1 & 2, but fails to teach or suggest that the coupling comprises four prismatic pins, each extending at the same angle relative to the direction of movement of the drive element, and each mold segment comprises a channel into which the pins fit and each channel having an axis corresponding to the axis of the corresponding pins.

Response to Arguments

5. Applicant's arguments with respect to claims 1-10 have been considered but are moot in view of the new ground(s) of rejection.

Aoki disclose that the drive elements (9, 11) are vertically drivable into the space between the mold cavities in order to drive the mold segments toward and away from each other within the mold cavities.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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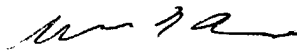
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 571-272-1136. The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin L. Utech can be reached on 571-272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN


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